

M E M O I R S
O F
L I T E R A T U R E.

M O N D A Y , June 7. 1714.

Compleat Sets of these Papers, and single Months, may be had, not only at the Publisher's, but also at the Booksellers of London and Westminster; at the News-Shops at Temple-Bar and Charing-cross; and of the Author, at Mr. Dawson's in Hunt's-Court, in St. Martin's-Lane, near the Church.

The Author does not think fit to confine himself to a certain Number of Sheets. He will publish Two, Three, or Four Sheets Monthly, and perhaps more, according as he is provided with Books, or other Materials, that may be acceptable to the Readers.

I.

JOHANNIS WOODWARDI
Med. in Coll. Greshamensi Prof. &c.
NATURALIS HISTORIA
TELLURIS illustrata & aucta.
Una cum ejusdem Defensione;
præsertim contra nuperas objecti-
ones D. E. L. CAMERARII
*Med. Prof. Tubingensis. Ad Illu-
strissimum & Nobilissimum Virum*
THOMAM PEMBROCHIÆ
*Comitem, &c. Accedit Methodi-
ca, & ad ipsam Naturæ normam
instituta, Fossilium in Classes Di-*

stributio. Londini: Typis J. M.
Impensis R. Wilkin, ad Insigne
Capitis Regis in Cœmeterio Divi
Pauli, & J. Vaillant, Bibliopol.
Roterodami. MDCCXIV.

That is, *THE NATURAL HISTO-
RY OF THE EARTH Illustrated
and Enlarged by the Author Dr.
WOODWARD, Professor of Phy-
sick in Gresham-College. With a
Vindication of the same; particularly
against the late Objections of Dr. CA-
MERARIUS, Professor of Phyick
at Tubingen. Inscribed to the Right
N Honour-*

Honourable the Earl of PEMBROKE. To which is added, a Method of reducing Fossils into several Classes. London. M DCC XIV. In 8vo. pagg. 135.

WHEN I gave an Account of Dr. Camerarius's *Dissertations*, in the Second Volume of these *Memoirs* †, I observed, that " he very much enlarges upon Dr. Woodward's Hypothesis concerning the Origin of Figured Stones, and raises several Objections against it ". And then I added, that " at the same time he highly commends that Curious and Learned Gentleman, and informs us, that his System is very much approved by the most considerable Persons of Germany, who love that sort of Study ".

Dr. Woodward undertakes to answer Dr. Camerarius's Objections in the Book, which makes the Subject of this Article; and this Performance is an Excellent Illustration of his *Natural History of the Earth*. The Author had all the necessary Qualifications to go about such a Work: He applied himself for many Years to the Study of Nature with an indefatigable Labour; he carefully surveyed the most considerable Mines of Great Britain, and other Places that have been digged; he observed with the utmost Attention the *Strata* of each Matter, the Situation of Minerals, and in what Order the several Sorts of Fossils are to be found; and then he faithfully communicated to the Publick the Result of his Observations. His Design was not to serve a pre-conceived Hypothesis, but to represent the true State of those things, as it appeared to him, and to draw from thence some undeniable Propositions, and such as did naturally arise from his Observations; without which all his Discoveries, though never so entertaining, seemed to him altogether useless.

When the *Natural History of the Earth* came out, it was quickly dispersed all over Europe, and approved by the Learned. Most Philosophers believed then that the Shells, to be found in the Earth, were Stones formed out of a Terrestrial Matter; whereas now there

are but few, who doubt that they are Sea-shells conveyed into the Earth by the Deluge. Among those Learned Men, who changed their Opinion after the reading of Dr. Woodward's Book, I must not omit Dr. Scheuchzer. That Eminent Physician, whose great Skill in Natural History is so well known, published in the Year 1695, a Dissertation, wherein he undertook to prove that the Shells, to be found under Ground, are mere Fossils: But after he had read Dr. Woodward's Book, he acknowledged his Error; and from that time, he has maintained the contrary Opinion in several of his Works.

Dr. Camerarius owns, as I have already observed, that the most Learned Naturalists of Germany have embraced Dr. Woodward's System. The Germans have made so great a Progress in the Knowledge of Nature, and their Country affords so many Helps towards it, that their Approbation must needs be very glorious to Dr. Woodward, and appear no small Confirmation of the Truth of his Hypothesis. *Hi, cum pro me stent, (says the Author) & sententiam meam Authoritate sua comprobent, Argumentisque confirmant, non est cur unius Camerarii, disertissimi licet, & quod facile credam, aliarum Disciplinarum peritissimi, impetum reformidem.*

Dr. Woodward has divided his Discourse into Three Parts. In the First, he shews that Dr. Camerarius has sometimes misrepresented his Opinions. In the Second, he takes notice of his Mistakes; and in the Third, he examines his Doctrine.

I. 1. Some Passages of Dr. Camerarius, concerning the *Cornu Ammonis* or *Ammonites*, give the Author Occasion to make the following Observations. The *Ammonites*, says he, is a Sea-shell, having all the Marks and essential Properties of a true Shell; but of a different Kind from all others. It is seldom to be met with upon the Shores. Dr. Woodward never saw but one Sort of those Shells found there; whereas many are digged out of the Ground. But (says he) all the several Kinds of Shells, to be found upon all the Sea-shores, have not been yet carefully observed and collected. Besides, there are many in the deepest Parts of the Sea, which never come near the Shores, and are never removed out of their Places by the most violent Storms. The *Ammonites* seems to be one of that Kind. Most of those Shells, that

are thrown upon the Shores by the Tide, or by high Winds, do not grow far from thence. The Agitation of the Waves, occasioned by the greatest Tempests, never reaches the deepest Parts of the Sea; and therefore it can be no wonder, if the Shells, that grow there, are seldom thrown upon the Shore.

Dr. *Camerarius* can hardly believe, that the Bottom of the Sea is calm at all times. Our Author wonders at it, since the thing is undeniable, and may easily be known from Books, and from the Testimony of those Men, who went into the deep Parts of the Sea, when its Surface was in a violent Agitation. Dr. *Camerarius* asks, Why Divers don't bring Shells out of the Bottom of the Sea? Dr. *Woodward* answers, That those Men are neither Naturalists, nor employed by those who love Natural History. When they go down into the Bottom of the Sea, not without being in great Danger of their Lives, they do it in hopes of a great Gain; and therefore they only look for Pearls, and other things of great Value, and mind nothing else. If Dr. *Camerarius* is not satisfied with this Answer, he must consider, says the Author, that Divers seldom look for Pearls at a great Distance from the Shore: They only go down into very shallow Places, if they be compared with the deepest Parts of the Sea. It is highly probable, that ever since the General Deluge, those deep Places have enjoyed a constant and perpetual Calmness. The Shells that lay there, were carried by the Flood into very remote Places, where many of them remained, when the Waters decreased. Such are the Shells that are now frequently to be found in the Earth, and but seldom upon the Shores, and of which Dr. *Camerarius* speaks in this Part of his Work.

The Author adds, that some extraordinary Storms, such as the Hurricanes which happen about the *Barbadoes*, and near the Continent of *America*, reaching much deeper into the Sea, than the common Storms, throw upon the Shore a greater Quantity of Shells, and even some that were never seen before. And 'tis not to be doubted, that if some Storms, more violent than Hurricanes, should penetrate into the Bottom of the deepest Seas, they would bring out of them *Ammonites*, and such other Shells, as came out in the Time of the Deluge, and now are never to be seen upon the Shores.

Any one, says the Author, who considers what a great Quantity and Variety of Shells, that grew in the Middle of the Ocean, is to be found in so many Places far distant from the Sea, even upon the Tops of the highest Mountains, and in the deepest Mines, and that none of them are to be met with near the Shores, may learn from thence what a dreadful Alteration was made in the Earth by the Deluge, and how difficult it is to conceive the prodigious Disorder and Confusion occasioned by that General Flood.

2. It frequently falls out, that young and small Sea-shells are to be found in the Earth with old and large ones of the same Kind. Dr. *Woodward*, considering that the former are of the same Size, as they use to be about the latter End of *May*, thought he might judge from thence at what Season of the Year the Violence of the Deluge put an end to their growing. The Author adds, that small and transparent Shells, perfectly grown up, are also to be met with, both in the Sea and in the Earth, as well as others, which grow tender and friable by Length of Time, as having contracted some Corruption, and therefore must needs perish. But he denies what Dr. *Camerarius* affirms, that there are several Shells in the Earth actually growing; and says, that if Dr. *Camerarius* can prove his Assertion, he will heartily acknowledge the Falsity of his own Observations, and embrace the Opinion of his Adversary.

3. Dr. *Camerarius* seems to believe, that there is a great Quantity of Shells in *Great Britain*, because it is an Island surrounded by the Sea, from whence those Shells have been conveyed into the Land through Subterraneous Passages, and by Inundations, and great Alterations that have happened in this Country. He adds, that we must not judge of other Countries by this Island, and that Shells are not to be found so plentifully in the Continent. Dr. *Woodward* answers, that this last Assertion is contrary to the Testimony of Ancient and Modern Writers. The Accounts which he has received from the Inland Countries of *Asia*, *Africa*, *America*, and *Europe*, and the Bones, Teeth, and Shells of Sea-Animals collected there, and brought into *England*, of which he has no small Number, do plainly shew the Falsity of Dr. *Camerarius*'s Opinion. Nay, that Learned Physician owns, that there are whole Mountains in *Germany* full of Shells; but he

N 2 says,

says, he never could see any about *Tubingen*. What then? replies Dr. *Woodward*. Has Dr. *Camerarius* so carefully searched into the Bowels of the Earth about that City, as to be sure that no Shells are to be found there? Perhaps they have been destroyed under Ground by an Acrimony, which easily consumes the Texture of such Bodies. But after all (continues the Author) suppose no Shells had ever been deposited in that Part of *Germany*, can this be alledged as an Argument against me? Did I ever say, that in the Time of the Deluge Sea-shells were left in every Part of the Earth? This is very unlikely, especially if it be considered that they have been so heaped up in some Places, as to form whole Hills and Mountains. Lastly, Dr. *Camerarius* says, that he never could see any figured Stones in his Journey over many Mountains of *Switzerland*, the *Valais*, and the *Alps*. But Dr. *Woodward* refers him to a Book of Dr. *Schnebzer*, entitled *Lithographia Helvetica Specimen*, and printed at *Zurich* in 1702. wherein the Author shews, that a great Multitude of Shells have been found in the Mountains of *Switzerland*, and elsewhere.

4. Dr. *Woodward* says in his *Natural History of the Earth*, that in the Time of the Deluge the Sea shells floated in the Waters, together with Sand, and the whole Matter of Stones and Minerals resolved into their constituent Parts; that this Matter getting into the Shells filled them up, and assumed their Form and Shape; and that the Shells became, as it were, the Moulds of that Matter. He adds, that when those Shells, either filled up or empty, with the whole Matter just now mentioned, came to sink down, they formed all the several *Strata* of which the Earth consists. Afterwards the *Strata* of Mountains being washed down by violent Rains and Torrents, and broke by such Accidents as frequently happen every where; the Shells contained in them appeared on the Surface, and being at last wasted or broke, the Matter inclosed in those Shells retained and exhibited their Concave or Internal Figure. The Author maintains against Dr. *Camerarius*, that among the prodigious Number of figured Stones, there are none that represent the Convex or External Form of a Shell.

This gives Dr. *Woodward* Occasion to make the following Observation. When Water (says he) impregnated with Vitriol, or

other such Salts, runs through the *Strata*, it dissolves by degrees the Shells lodged in them, and carries away all their dissolved Particles, by which means the Space, that was filled up with those Shells, remains empty. Thus, for Instance, (to mention no other Places) there is in *Portland* a large *Stratum* of very hard Stone, where one may see a vast Number of such Cavities exactly representing the Shape and Size of Shells; and if melted Lead be infused into those Cavities, it will exhibit the very Figure of those Shells. The Author adds, that when the Water carries along with it, not only Salts, but also Particles of Minerals, it frequently leaves those Particles in such Cavities, and fills them up. When this happens, that Matter does constantly represent both the outward and inward Figures of the Shells, whose Place they supply.

5. Dr. *Woodward* makes several Remarks, that are worth reading, upon the Situation of Metals and Minerals, and of the *Strata* of Stones and Earth. I shall only insert the following Observations. There are, says he, many large *Strata* of Chalk in *Kent*, *Surrey*, *Essex*, *Hertfordshire*, *Bucks*, *Oxfordshire*, and in many other Parts of *England*, as well as in Foreign Countries, where a prodigious Quantity of very different Shells is to be found. But all of them are of a lighter sort, and come pretty near the Specifick Gravity of Chalk. Whereas in the *Strata* of Stone, (a Matter heavier than Chalk,) there is as great a Number and Variety of heavier Shells. This, says the Author, could not happen by Chance; and no other Reason can be affigned for it, but what has been given in the *Natural History of the Earth*. He adds, that in the Time of the Deluge Crustaceous Animals, such as Lobsters, &c. were doubtless thrown out of the Sea, as well as the Testaceous; and yet few of them are to be found in the Earth, whilst many Thousands of the Testaceous Kind have been digged out every where. Dr. *Woodward* does not wonder at it. Those Crustaceous Fishes (says he) being lighter than Chalk, and any other earthly Matter, sunk down the last of all, and lay upon the very Surface of the Earth, where being continually exposed to the Injuries of the Air, Water, &c. they were corrupted, and wholly destroyed.

6. Dr. *Camerarius* pretends, that, according to Dr. *Woodward*, the Olive-tree, a Leaf whereof

whereof was brought to *Noah* by a Dove, did swim in the Waters. The Author answers, that he never said any such thing, but the quite contrary. He observes, that one may find in the deepest *Strata* of Stone, Leaves, and other Parts, not only of such Plants as are common and well known, but also of others, which do not grow in those Countries. Besides, in most Parts of the Earth, Shrubs and Trees have been digged out, some of which were very large, and of several Kinds, which those Places do not produce. Lastly, many large Trees have been found buried in several Islands, where the Soil is so barren, or the Air so cold and so sharp, or the Winds so violent and stormy, that no Trees can grow there, nor does it appear from History or Tradition, that ever they grew there. Such a general Devastation could not be produced but by a general Cause; and indeed (continues the Author) there are various Accidents and *Phænomena*, which shew that the Universal Deluge was that Cause, in such a convincing Manner, that no reasonable Objection can be raised against them. 'Tis observable, that the Trees just now mentioned are to be found with their Roots; from whence it plainly appears, that the Earth, in which they stood, was dissolved.

The Author confirms those Observations by the Tradition of the most Ancient Nations, and by several Passages of the Holy Scripture. I shall only mention some of them. *Diodorus Siculus* * tells us, that the Philosophers call the Fruit of the Vine *Bacchus*, and that he is said to have been born twice of Jupiter, because in *Deucalion's Deluge*, (which the Heathens generally confound with that of *Noah*,) that Fruit was thought to have been destroyed with all other Fruits, and then to have grown again. The next Passage, wherein *Seneca* describes the Deluge mentioned by him, does very well agree with Dr. *Woodward's* Notion. *Solutis quippe radicibus, (says † that ingenious Philosopher,) Arbuſta procumbunt, & Vitis atque omne virgultum non tenetur sola, quod molle fluidumque est.* — *Labant & madent Tecta, & in imum usque receptis Aquis Fundamenta de-*

sidunt, ac tota Humus stagnat; frustra titubantium fulcra tentantur, Omne enim Fundamentum in lubrico figitur, & lutos a Huno nihil stabile est. Afterwards *Seneca* speaking of the Earth, says †, *Quam (terram) diximus esse mutabilem & solvi in Humorem.* — *Partes ejus interire debuerint, aboliriue funditus totæ, ut de integro totæ rudes innoxiae generentur.* The same Philosopher goes on with his Description of the Dissolution of the Earth in these Words, *Incipiet ergo putrefactio, dein laxata ire in Humorem, & assidua Tabe defluere.*

Among the Passages of the Scripture quoted by Dr. *Woodward*, I shall only insert the Two following, *Psalm XLVI. 6. He uttered his Voice; the Earth melted. Amos IX. 5. And the Lord God of Hosts is he that toucheth the Land, and it shall melt, and all that dwell therein shall mourn, and it shall rise up WHOLELY like a Flood, and shall be drowned as by the Flood of Egypt.* The Author observes, that the horrid Devastation, occasioned by the Deluge, being well known to the Ancient Hebrews, the Prophets did frequently allude to it, in order to terrify that People.

Dr. *Woodward* proceeds to give an Account of the Condition and Situation of Trees after the abating of the Waters of the Deluge. Most Trees, says he, which had large and far extended Tops, were then situated in such a manner, that their Branches stood out to a great Height in the Air. He believes that this was the Situation of the Olive-tree, a Leaf whereof was brought to *Noah* by a Dove. Dr. *Gamerarius* maintains, that the Leaf, which the Dove brought to the Patriarch, plainly shews that the Earth was not dissolved, and that the Olive-tree stood fast in the Ground, whilst the Waters covered the Earth. The Reason he gives for it is this: If that Tree, says he, had been swimming, a Leaf plucked off from it would not have been a Sign that the Earth was dry. Dr. *Woodward* answers, that *Noah* inferred no such thing: He only guessed that the Waters were so far abated, that Trees began to appear. The Patriarch might have thought so, whether the Olive-tree had lain on the Surface of the Earth, or stood fast as it did before. *Moses* is wholly silent about the Situation of that Tree. As

* Lib. III. pag. 195, 196.

† *Seneca Nat. Quæst. L. III. c. 27.*

† C. 29.

for what concerns *Noah*, 'tis manifest from this very History, that he knew nothing of what passed out of the Ark. If he knew not that the Waters were abated, till he sent out the Dove; much less is it probable, that he knew that the Earth was dissolved, and that the Trees had been carried away at random. If therefore he had believed (which is not certain) that the Olive-tree stood still, his Mistake could not be alledged as an Argument against Dr. *Woodward*.

But here is a Difficulty not mentioned by Dr. *Camerarius*. Though *Olearius*, *Tavernier*, *Sir John Chardin*, and other Travellers say, that there are abundance of Olive-trees in *Persia*, &c. yet there is not one such Tree now in all the Country where the Ark rested. Hence it is that *many wonder*, where the *Dove could get the Leaf, which she brought to Noah* †. In Answer to this Difficulty, Dr. *Woodward* says that perhaps a great many Olive-trees grew in the Neighbourhood of Mount *Ararat* before the Deluge, and that they were all destroyed, sinking under the Ground, or lying on the Surface of the Earth. Nor can any one wonder, that the Olive-trees of Mount *Ararat* should have undergone the same Fate as those *English Pine-trees*, that are so frequently to be found at the Bottom of marshy Places, though none grow there, unless they be planted, and carefully brought up. I proceed to the Second Part of this Discourse.

II. 1. Dr. *Woodward* having observed, that the *Glossopetrae*, that have been digged out in most Parts of *England*, and those which have been brought to him from the Isle of *Malta*, and many other Places, are the very Teeth of *Sea-Dogs*, and other such Fishes, answers what Dr. *Camerarius* says to the contrary, and vindicates against him the Opinion of *Fabius Columna* about the same Subject.

2. Dr. *Camerarius* says, that though Sea-shells were to be found in the Bowels of the Earth, yet it would not follow from thence, that the Earth was dissolved by the Deluge.

† *Il n'y a point d'Oliviers; ce qui fait que plusieurs s'étonnent où la Colombe peut prendre le Rameau qu'elle apporte à Noé.* *Les Voyages & Observ. du Sieur de la Bouillaye, 4o.* p. 85.

He adds, that such a Dissolution is a mere Supposition, which has no Appearance of Truth. The Author answers, that Dr. *Camerarius* should have shewed how the Shells of so many different Sorts of Sea-Animals, as they are now found under Ground, could have been so exactly filled up with Stone, Spar, and other Mineral and Metallick Matter, without such a Dissolution; how it comes to pass, that the Surfaces of Stones, Spars, and other Mineral and Metallick Bodies, digged out in so many Places, exhibit not only the Form, but also the smallest Lineaments of those Shells imprinted upon them; lastly, how so great a Quantity and Variety of Sea-shells could sink into the *Strata* of Stones, and of most Sorts of other earthly Matter, and be so closely mixed with them, as to constitute one and the same Mass, even in the remotest Places from the Sea, and to as great a Depth in the Earth, as Diggers are come to. Dr. *Camerarius* (says the Author) should have explained, how all those things could be effected without a Dissolution of the Earth and Fossils, instead of condemning by his bare Authority an Hypothesis, whereby all those *Phænomena* are accounted for in a plain and easy Method, and such as agrees with the Laws of Nature.

Dr. *Camerarius* cannot believe, that the tender Sea-shells remained entire during the Deluge, whilst the most solid Marbles, and the hardest Stones were dissolved according to Dr. *Woodward's Hypothesis*. The Author answers in the first place, that those will less wonder at it, who know that when the outward Parts of Marbles, and very hard Stones, that lye exposed for a long time to the Air, or the Acrimonious and Saline Vapours of the Sea, are by degrees wasted and consumed, the Shells contained in them not only appear on their Surfaces, but also frequently remain entire for a long time, or only very little damaged by the same Air, and the same Vapours. Secondly, Dr. *Woodward* answers, that his Account of the true Cause of the Dissolution occasioned by the Deluge, being too long to be inserted in his *Natural History of the Earth*, or in this Dissertation, his only Design in those two Pieces is to shew, that the Earth and all Fossils were truly dissolved, but not Shells, Animals, and Vegetables; which he thinks he has fully proved. Thirdly, he adds, that there is a great Difference in the Frame and Contexture of the Bodies just

just now mentioned. Animals and Vegetables consist of fibrous Parts, and their Fibres are connected and complicated several ways; whereas the several Parts of Fossils, without excepting the hardest, are only contiguous. Whoever considers the Difference of those Bodies, says the Author, will not perhaps find it very difficult to know why the latter were all dissolved, whilst the former continued in the same Condition as they were in before.

3. The *Abyss*, or the vast Receptacle of Subterraneous Waters, appears very unlikely to Dr. *Camerarius*; and he says, he would be glad to know by what Arguments it can be proved. Dr. *Woodward* does not think it necessary to alledge new Reasons, and least of all those which he hopes to publish one Day, in order to confirm what he has asserted concerning the Subterraneous Waters, since what he has already said upon that Subject in his *Natural History of the Earth*, is sufficient to prove the Truth of his Assertion. However, because Dr. *Camerarius* does not seem to have duly considered the Arguments alledged in that Book, our Author is willing to propose again two of those Arguments; the first whereof shews what vast Quantity of Water covered the Earth in the Time of the Deluge; and the second, in what Place those Waters lie now concealed.

As for what concerns the first, viz. the vast Quantity of Water, one may judge of it (says the Author) from the regular Situation of the several *Strata*, according to their different Degrees of Gravity; for, an immense Quantity of Water was necessary to produce that Effect. Such a Disposition of things, to be observed every where, could not have been effected, unless the Fluid had been very thin; unless the dissolved Particles of Earth had been at a proper Distance one from another; lastly, unless their Descent had been very great, or the Place, where they began to sink, very distant from that wherein each of them rested in its due Order. But none of those things could have been done, had not the Quantity of the Water far exceeded the Quantity of the earthly Matter. Which being supposed, it will be no difficult thing to explain that *Phænomenon*. The Swiftness of the Descent of Bodies in a Fluid being different, according to their different Gravity, it was necessary that among those (for Instance,) which were of

the same Size and Figure, and began to descend from the same Height, the heaviest should have a swifter Descent, and lie at the Bottom. But because those Bodies did so much differ one from another in Gravity, the heavier Bodies falling now and then in their Descent upon the lighter ones, must needs have been considerably obstructed and retarded in their Motion; and the Motion of the lighter Bodies must have been accelerated by the Shock of the heavier ones: From whence it necessarily follows, that some Confusion and Inequality must have happened in the Sediment. When the heavier Bodies came down to the Bottom of the Waters, the lighter ones continued to descend in their Order, unless they happened to rest at the same time; because all the earthly Matter, which filled up the middle Space between the heavier and lighter Bodies, subsided between them. When there was no such Impediment, those Bodies lay at no great Distance one from another; but when the lighter Bodies were thus obstructed, they lay at a greater Distance above the heavier ones. From these and other Observations concerning the Descent of Bodies, the Author infers, that so great a Work could not be done, but in the Waters of the whole Abyss: Which sufficiently proves the Existence of such an Abyss.

When the Flood had been Forty Days upon the Earth, and the Waters had so prevailed, that the high Hills, that were under the whole Heaven, were covered Fifteen Cubits upward, the Waters prevailed again, and 'tis likely they did so during a great Number of Days. The Sacred Historian mentions an Hundred and Fifty Days in all. During the first Forty Days, the Waters came out of the Abyss; and those Waters, together with the Rain, covered the Mountains. The following Days the Earth was dissolved: The Waters that remained in the Abyss came out of it: And all the earthly Matter being dissolved floated in the Waters, and then sunk, and formed a new Orb, like that which was created at first. It was without Form, that is, destitute of that Form which might render it inhabitable, and fit for the Use of Men and Animals. Its Surface was even, and spherical. It had no Hills, no Valleys, no Dens, and Gaps necessary for the Subsistence of Animals, and the Production of Vegetables, and Minerals. That Earth was also

void,

void, like the first, whilst the Waters covered its Surface, and till the Terrestrial Sphere was broke, that Mountains might be raised, Valleys depressed, and Gaps opened, through which the Waters might go down into the Abyss. But when the Waters were gathered together into one Place by the Word of God, that is, into the Subterraneous Abyss, and into the Seas, then the dry Land appeared, and the Earth had a Form fit for Habitation, and such as it was designed for. Dr. Woodward says he will enlarge upon this Subject in another Work; and in the mean time, he believes that he has sufficiently explained the Sense of these Words of Moses, and the Earth was without Form, and void. He adds, that those Words gave the Heathens Occasion to think of a Chaos; wherein they have been followed by most of the Modern Philosophers. He is of Opinion, that the Jewish Doctors, and our Divines, do not seem to understand that Passage perfectly, for want of having a true Notion of the Frame and Constitution of the Terrestrial Globe, as it has been described by Moses, in very few, but very proper Words.

The Second Argument to prove the Existence of the Subterraneous Waters, is taken from the Consideration of Earthquakes. Dr. Woodward thinks, he has sufficiently proved that Earthquakes are occasioned by the Violence of those Waters. A great Part of the Terrestrial Globe (says he) has been frequently shaken at the same Moment; from whence he infers, that the Waters, which were the Cause of those Earthquakes, had as great an Extent as that Part of the Globe, and are a continued fluid Body. There are also Instances of universal Earthquakes, says the Author, which shew that the whole Abyss was agitated. For such a general Effect must needs be produced by as general a Cause, which affects the whole Earth; and that Cause can be nothing else, but the Subterraneous Abyss. Dr. Woodward adds, that we know from very credible Writers, and even from Eye-Witnesses, that in some Earthquakes, which have happened in our Days, the Earth moved like Waves, and with such a Violence, as to represent exactly the Waves of the Sea agitated by a strong Wind. Any one (continues the Author) who considers that *Phænomenon*, will not only acknowledge that there is a Subterraneous Abyss, and that Earthquakes

are occasioned by the Waters of that Abyss; but he will also believe, that the Terrestrial Part of our Globe is like a thin Shell, which encompassing an immense Mass of Waters on all Sides, is moved and shaken by those Waters, in the same Manner as they themselves are moved and tossed. As the first Earth, under which no body can doubt that there was an Abyss, was designed for the Habitation of Men, and to produce Vegetables, and all other things necessary for the Subsistence and Conveniency of Men and Animals; so the Second Earth was made for the same Use. To that end, there was no need that the Earth should be thicker than it is now. A thicker Crust would have continually prevented the Passage of the Vapours, and the Communication between the Abyss and the Atmosphere, which is so necessary to Human Life, and the Product of the Earth.

Dr. Woodward adds, that his Notion of the Terraqueous Globe does perfectly agree with what we read of it in *Job*, *Moses*, *David*, and other Hebrew Writers. Those Holy Men say that there is an Abyss, or a vast Receptacle of Waters, encompassed by the Earth; that the Abyss has a Communication with the Ocean, and occasions Vapours, Rains, Springs, and the various *Phænomena* of the Earth and Atmosphere; that the Waters of the Abyss came out in the Time of the Deluge, and covered the Face of the Earth; that the Terrestrial Crust was dissolved, and floated in the Waters; that it sunk by degrees, and was formed into a new Orb like the first, encompassing on all Sides an empty Space fit to receive the Waters; that the Terrestrial Sphere being broke at last, the Waters went down into that Place, and the Earth was dried up, and became fit for all the Uses it was designed for. All those things, says Dr. Woodward, were not performed mechanically, and by the mere Power of Nature, but by the same Direction of the wise Creator, who made the first Earth.

In the next place, the Author mentions the several Benefits arising from the Subterraneous Abyss. It is, says he, the Principle and Origin of every thing that happens in the Earth, upon its Surface, and in the Atmosphere. If the same Seasons are so different, as to be colder, more wet, and less fruitful and wholsom in some Years than in others,

others, it is chiefly to be ascribed to the Operation of the Subterraneous Waters. Dr. Woodward adds, that Earthquakes, Vulcanos, the Vapours of Mines, Rains, Springs, and Rivers, Thunder and Lightning, Frost, Winds and Storms, proceed from the same Cause, as he hopes to shew at large in another Work. All those things, says he, derive their Original from the Abyss. Hence it is that when they are to happen, one may observe several Indications of them in the Sea, in large Lakes, in Springs, and deep Wells, in the Bowels of the Earth, in Dens and Mines, before they begin to work on the Surface of the Earth, or in the Atmosphere.

4. Dr. Camerarius says, it appears from History that several Mountains have been raised by Earthquakes. Dr. Woodward denies, that History affords any such Instance; nor does his Adversary alledge any. The Author adds, that unless Dr. Camerarius can quote some Writer, who testifies that the *Alpes*, the *Appennine*, Mount *Taurus*, *Atlas*, or any single Mountain, have been produced by an Earthquake, he will continue to believe that they were formed in the Time of the Deluge, as he has shewed in his *Natural History of the Earth*. For, says he, if the Mountains to be found every where, had been raised by Earthquakes one after another, and in several Ages, such wonderful *Phænomena* would doubtless have been mentioned by the Historians of those Times.

5. As for what concerns Islands, Dr. Camerarius, far from believing that they are as Ancient as the Deluge, maintains that the new Isle of *Santorini* is sufficient to overthrow the whole System of Dr. Woodward. That Island, says he, came out of the Sea in our Days after several Earthquakes, and attended with great Roarings and Flames. Dr. Woodward answers, that there is no Difference between that Island and *Monte di Cenere*, of which he says in his *Natural History of the Earth*, that it is nothing else but a *Heap of Stones, Earth, and Ashes thrown up by a Vulcan*. He adds, that he never denied that Vulcanos rage under the Sea, with such a Violence, as to break out through the Bottom of it, and to throw up so great a Quantity of Matter, as will form a Hill standing above the Surface of the sea. If therefore Dr. Camerarius thinks fit to call by the Name of *Mountains* those Hills that are thus raised

upon the Earth, he may, if he pleases, bestow the Name of *Islands* upon those that rise in the Sea. When Dr. Woodward derived the Origin of Mountains and Islands from the Deluge, he never meant such confused and undigested Heaps. The Matter both of Mountains and Islands, says he, is disposed in a certain Order, like every other Part of the Earth, and divided every where into several *Strata* lying one over the other; whereas *Monte di Cenere*, and the Isle of *Santorini*, are nothing else but unformed and undigested Heaps of broken Pieces, Ashes, and Rubbish.

III. In the Third Part of this Discourse, the Author examines and confutes the Doctrine of Dr. Camerarius. That Doctrine consists of several Conjectures.

1. *The First Conjecture.* Perhaps some Shells were laid in the Earth before the Deluge, and in the first Separation of the Waters from the dry Land. That Conjecture, says Dr. Woodward, will not appear very probable to those, who shall consider what immense Quantity and Variety of Shells is to be found in the Earth, besides whole Skeletons of Whales, Teeth, and Bones of Sea dogs, and many other Fishes. The Number of Shells lying in the Bowels of the Earth is so vast, that the Author has seen a great many Thousands of those called *Cerchæ Animalia* by *Fabius Columna*, in the Fields and Mines of Gloucestershire, not to mention those which he has received from other Countries, and almost from all Parts of the Earth. Can any one believe, that so great a Quantity of Shell-fish of the same Kind should have been created in the very Beginning of the World, and then quickly destroyed without any Reason for it? Besides, the Earth affords every where small and young Shells mixed with large and old ones; and the former stick to the latter, just in the same manner as they do in the Sea, that they may the better secure themselves from the Violence of Tides and Storms: Which shews that they were not created all at once, but generated by degrees and at several times. But, continues the Author, not to mention the Bones of Four-footed Creatures, and Plants, especially those large Trees that are to be found in the *Strata* of the Earth, and do not grow in Water; how can Dr. Camerarius advance a Conjecture plainly inconsistent with the

O Natura-

Narrative of *Moses*? How could Fishes, and other Sea-Animals, be left in the Earth, when the *Waters* were separated from the dry *Land*, since *Moses* tells us, that Fishes were not then created? For it was on the third Day of the Creation, that the *Waters* were gathered together into one Place; but Fishes, and other Creatures that live in the *Sea*, were only made on the Fifth Day.

2. *The Second Conjecture.* Perhaps most of these Shells were thrown by the Deluge into the Gaps and Chinks of the Earth. Those Gaps, says our Author, are a mere Invention of Dr. *Camerarius*, that he may the better explain how Shells got into the Bowels of the Earth, and elude the Doctrine of the Dissolution of the *Strata*. If those Shells had been thrown into Gaps, they would be found there still. But Dr. *Woodward* never found any in such Places, nor ever read or heard that any body did. They always lie in the *Strata* of Earth, or in the very Substance of the hardest Stones. It were in vain for Dr. *Camerarius* to say that those Chinks and *Hiatus*'s have been filled up in process of Time; for then the Shells would be found in perpendicular Rows, and not in the *Strata* themselves, nor in that adventitious Matter, with which the Gaps are supposed to have been filled up: But the contrary is most certain; for those Shells are to be found promiscuously, and without any such Difference, in all the Parts of the Earth. Besides, had there been formerly any such Gaps filled up in time, one might observe some Vestiges of them, from the various Matter, Constitution, and Hardness of one and the same *Stratum*; but such a Variety does not appear any where. The Author adds, that abundance of Shells are to be found in large Tracts of Ground, particularly in *England*, almost all over *Gloucestershire*, *Oxfordshire*, *Northamptonshire*, *Somersetshire*, and *Wiltshire*; from whence he infers, that if these large Tracts of Ground in *England*, and in all other Countries, had been empty Gaps, those Gaps must have been prodigiously great, and such as can hardly be supposed. Lastly, Dr. *Woodward* observes, that Shells are frequently to be found so broken and divided, that one Part of the same Shell lies on the one Side of a Chink, and the other on the other Side. Which plainly shews, that those Shells lay in the *Strata* before there was any such Gap, and that the

same Shells and the *Strata* were both broken and separated at the same time, and by the same Force.

3. *The Third Conjecture.* Perhaps those Shells were conveyed into the Earth by particular Inundations. In order to confute this Conjecture, Dr. *Woodward* asks Dr. *Camerarius*, whether he can alledge any Instance of a particular Inundation, that reached the middle Parts of the Continent; that covered *Germany* for the Space of Two or Three Hundred Miles, (for Shells are to be found there at such a Distance from any Sea); that carried Fishes peculiar to the *America*, and other far distant Seas, into the very Heart of *England*; that conveyed Crocodiles into *Germany* †, Elephants into *England* ‡, and those *American* Stags, called by us *Moose-Deer*, whose Skeletons, and Horns, of a prodigious Bigness, are frequently digged out in *Ireland*; lastly, that destroyed so many Trees, such as those large Pines and Firs to be found under Ground in so many Parts of *England*, where it does not appear that ever they grew: Nay, *Cæsar* says (*Comm. de Bello Gall. L. 5*) that in his Time there were none in this Island. Besides, continues the Author, Dr. *Camerarius* should have considered, how Sea-Animals could have been so mixed by such Inundations in the *Strata* of Marble, and of all other Stones, as to be found in the upper and lower Parts, and in the Middle of them; how some of those Animals could get into the Bowels of the Earth to the Depth of a Hundred Feet, and how others could be raised to the Tops of the highest Mountains in *Europe*, *Asia*, and *America*. But to mention only the Mountains of *England*, if Shells were carried to the very Tops of those Mountains by a particular Inundation, every Part of the Terrestrial Globe must have been covered with Water to the same Height with the highest Mountains in *England*. These Considerations are a sufficient Answer to the Third Conjecture of Dr. *Camerarius*.

4. *The Fourth Conjecture.* Perhaps the Reason why so many Shells are to be found in Eng-

† See the First Volume of these Memoirs Numb. XLIII.

‡ Bones and Teeth of Elephants have been digged out in several Parts of *England*.

land, is because that Island being surrounded by the Sea, the Waves get into it through Subterraneous Channels. Dr. Camerarius (says our Author) should have shewed in the first place, that there are such Subterraneous Conduits; but none of them have hitherto been discovered: And yet they might easily be found; for they must needs be very spacious to convey such large Bodies into the very Heart of this Island. To mention only some of those Bodies: Among those Shells that are called *Ammonite*, many two Foot broad have been digged out in *Portland*, and some of a larger Size in *Gloucestershire* and *Somersetshire*. Besides, Skeletons and Bones of Whales, and other great Fishes, are to be found in this Island.

But supposing the Existence of such Subterraneous Channels, why should those Fishes get into them and even into Places so far distant from the Sea? For the Earth was not designed for their Habitation. If it be said that such Multitudes of Fishes, some of which are prodigiously large, have been thrown into the Earth by a violent Force; how comes it, that we don't see the like Numbers thrown into it still by the same Force?

Besides, the Water conveyed through those Channels could not rise above the Height of the Surface of the Sea; but Shells and other Bodies are to be found on the very Tops of the most lofty Mountains, some Miles higher than the Sea, if not in *England*, at least in other Countries.

Lastly, Those Bodies never appear in Gaps, or in Subterraneous Conduits, but in the very *Strata* of Marl, Clay, Stones, and other thick and solid Matter; which plainly shews, that they have not been carried thither through Subterraneous Channels.

5. *The Fifth Conjecture.* Perhaps God has created in the Bowels of the Earth several Sorts of Stones, that are like Sea-shells. At this rate (says the Author) Filberds, Pine-Apples, Oaks, and other Vegetable Bodies, to be found under Ground to a very great Depth, must have been also created there. But supposing that God created whole Shells in the Ground, did he also create several Parts and small Pieces of those Shells? For such Pieces are digged out every where. This Conjecture of Dr. Camerarius (continues the Author) will appear more satisfactory, if we suppose Barks of Trees created without

Wood, Hides without Flesh and Bones, Mens Skins without Bodies, and Hands and Legs without the other Limbs.

Dr. Woodward makes some other Observations in Answer to this last Conjecture. 1. Those Shells to be found under Ground, which have been better preserved than others, afford a true Marine Salt, like Shells taken out of the Sea, or thrown upon the Shore. 2. There are in the Earth Teeth of Fishes worn out, as the Teeth of the same Fishes taken in the Sea use to wear out by eating their Food. 3. The Shell-fish, called *Purpurea*, has a long Tongue with a bony and sharp End, with which it bores the Shells of other Fishes, that it may live upon them, as it has been observed by the Ancient Naturalists, and particularly by *Aristotle* and *Pliny*, whom the Author quotes. But such bored Shells are frequently to be found in the Bowels of the Earth; from whence it plainly appears, that they had formerly living Fishes contained in them, and were in the Sea with the *Purpurea*. 4. 'Tis an usual thing to find in the Earth Oyster-shells, Cockle-shells, &c. that retain still some Vestiges of Tendons, and other Indications, plainly shewing that Animals were formerly contained in them. 5. The *Echinite*, *Conchite*, *Cochlite*, and other Bodies of that Kind, consisting of Stone, Spar, and other Mineral Matter, which are as large as the Shells from which they had their Names, and represent their whole inward Shape, must needs have been formed in that Sort of Shells altogether empty. But there are others (Dr. Woodward has some of them) consisting likewise of Stone, Spar, &c. that represent only some Parts of *Echinite*, *Conchite*, and *Cochlite*. Which shews that the Shells had Fishes in them; and consequently could admit of no more Stony or Mineral Matter, than was sufficient to fill up their Vacuities. Now it plainly appears from thence, that those Shells were originally in the Sea.

Dr. Woodward enlivens this Part of his Discourse by comparing the last Conjecture of Dr. Camerarius with the Opinion of some Writers, who did not scruple to affirm, that the *Urns*, *Pateræ*, *Simpula*, &c. to be found under Ground, did naturally grow there. Balbinus believes, that *Clay* — assumes of it self the Shape of a Pot, by the mere Direction of Nature. Balbinus existimat Argillam — ad figuram Ollarum sponte sese ac libenter

O 2 com-

ponere, Naturā ipsā quod fieri velit docente*. Another Writer †, speaking of the earthen Pots, that have been digged out near Spremberg in Lusatia, does not think it impossible for Nature to form such Vessels: Credit Naturae in ejusmodi fabricandis Ollulis Possibilitatem non esse detrahendam.

Lastly, Dr. Camerarius grounds his Conjecture upon *Analogy*. As God, says he, was pleased that the Sea should produce several Sorts of Vegetables, such as Corals, Sponges, *Alga*, *Fucus*, &c. altogether analogous with those that grow upon the Earth; in the same manner there may be in the Earth a Vegetation of Stones like Sea-shells, &c. Dr. Woodward denies, that Corals, Sponges, &c. have any Affinity in their outward Form, or inward Contexture, with any Terrestrial Bodies, and says that neither he, nor any body else, did ever see any Instance of it. I omit some other Observations upon this last Conjecture.

Thus, in order to satisfy the Curiosity of the Readers, I have given a large Account of this Book. The Subject of it is both important and entertaining; and the Author discovers no less Wit, than Learning and Judgment. I must observe, that he does Justice to Dr. Camerarius by acknowledging his Merit and his Erudition.

Dr. Woodward has inserted at the End of his Book, a *Method of distributing Fossils into several Classes*, which is a remarkable Instance of his great Skill in Natural History. That Method (the first of that Kind, that ever was published) is dedicated to the Illustrious Sir Isaac Newton, at whose Desire it has been composed; and the Author's Epistle Dedicatory deserves to be read.

* *Dissert. Epist. de Cancris & Serp. petrif.*

p. 43.

† *D. Ehr. Hagendorf Miscell. Cur. Ann. 3.*
Obs. 137.

II.

THE ECCLESIASTICAL HISTORY of GREAT-BRITAIN, chiefly of ENGLAND:

From the first planting of Christianity in this Island, with a brief Account of the Affairs of Religion in Ireland. Collected from the best Ancient Historians, Councils, and Records. Vol. II. Beginning at the Reign of King Henry VIII. and continued to the Death of King Charles II. By JEREMY COLLIER, M. A. London: Printed for Samuel Keble at the Turk's Head in Fleetstreet, Richard Sare at Grays-Inn-Gate, Holborn, John Nicholson at the Queen's-Arms in Little Britain, Benjamin Tooke at the Middle-Temple-Gate in Fleetstreet, Daniel Midwinter at the Three Crowns in St. Paul's Church-yard, George Strahan at the Golden Ball in Cornhill, and Maurice Atkins at the Golden Ball in St. Paul's Church-yard. MDCCXIV. In Folio. pagg. 904 for the History, and 119 for the Collection of Records, besides the Preface and the Index.

THE greatest Part of this large Volume is a new History of the Reformation of England, wherein the Author has inserted several Reflexions very different from those of the Lord Bishop of Salisbury. Mr. Collier seems to intimate in his Preface, that those Reflexions will not be acceptable to every body. I shall say nothing of that Part of his Work, being more willing to take notice of those things for which he will have the general Approbation of the Publick. I mean his great Labour and Industry in collecting so many Materials, and digesting them into Order; his inserting several Pieces never before published, and advancing nothing without quoting an Authority for it; the great Judgment he discovers in the Choice of the Materials; and lastly, his Endeavours to render the History of the Reformation of England as compleat as he could.

Mr. Collier has had a free Access to all the publick Records: Some Gentlemen have furnished him with valuable Remains in Manuscript;

nuscript; and he has taken care to insert in the Margin the Names of the Places and Persons. Besides, among the Printed Books which he has made use of, there are some, whose great Scarcity renders them no less curious than Manuscripts.

" As the main Points in Difference (says the Author) between the Church of *Rome* and *England* came up, I have endeavoured in both Parts of this History to justify the Reformation of the latter".

Mr. *Collier* complains, that the Council of *Trent* has decreed disputable Doctrines into Articles of Faith, and set up *Scripture* and *Tradition* upon an equal Foot of Authority. " Thus (continues the Author) instead of relaxing, they have drawn the Knot, thrown in new Difficulties, and made the Conditions of Communion more shocking and impracticable".

The Author wishes the Clergy would apply themselves to the Study of the Law more than they do; and then adds, " In my humble Opinion, *Coke's Institutes* would be better Furniture than *Calvin's Institutions*; and the reading the *Statute Book* much more serviceable than some *Systems of Dutch Divinity*".

In the remaining Part of the Preface, the Author takes notice of what appears to him most remarkable, with respect to the Ecclesiastical History of *England*, in those Volumes of the *Tower Records*, that have been published by Mr. *Rymer*, since the *First Part* of this *History* was finished.

After the Writing of this Preface, and when this Second Part was almost printed off, Mr. *Rymer* put out the Fifteenth Volume of the *Tower-Records*; out of which Mr. *Collier* has inserted several Pieces at the End of his Preface. The two last Pieces are, 1. A License granted by King *Edward VI* to *Dudley Earl of Warwick*, his Countess, and Family, for eating Flesh in Lent, and all other Days of Abstinence. It is to continue during the Earl's Life, and sets aside all Acts of Parliament, and Canons to the contrary. 2. A Warrant, or *Writ*, in Queen *Elizabeth's* Reign, for burning two *Flemish Anabaptists*.

This Work contains a great Number of Curious Facts. Here follow some of them.

1. Mr. *Collier* gives us a long List of the Relicks in the Reign of *Henry VIII*. The Blessed Virgin's Girdle was to be seen in

Seven different Places, and her Milk in Eight. The Bell of St. *Guthlac*, and the Felt of St. *Thomas of Lancaster*, were accounted sovereign Remedies for the Head-Ach. This *Thomas*, Earl of *Lancaster*, was one of the rebellious Barons in *Edward the Second's* Time, and executed for high Treason. The Penknife and Boots of *Archbishop Becker*, and a Piece of his Shirt, were very much valued by Women with Child. The Coals that roasted St. *Laurence*, two or three Heads of St. *Ursula*, *Malchus's* Ear, and the Paring of St. *Edmund's* Nails, were in great Veneration. To those Relicks, the Author adds the Figure of an Angel with one Wing, which brought over the Spear's Head, that pierced our Saviour's Side. An Image of our Lady, with a Taper in her Hand, which burnt nine Years together without wasting; but at last was put out by Perjury. It appeared upon Examination, that this was nothing but a Piece of Wood. Our Lady of *Worcester* was another Piece of Imposture; for when her Habit was taken off, the Figure was quite of another Kind, and represented a Bishop Ten Foot high. Besides, there were two remarkable Rarities, which must not be forgotten. One of them was the *Road of Grace* at *Boxley* in *Kent*. There was so much of a Machine in this Figure, that the Eyes would turn, and the Lips move upon Occasion. It was publickly exposed at *Paul's Cross* by *Hilsey*, Bishop of *Rochester*, and there knocked in Pieces. The other was a Relick at *Hales* in *Gloucestershire*, where the Blood of our Saviour brought from *Jerusalem* had been kept for several Ages. If a Man was in mortal Sin, and had not received Absolution, he could not see the Relick, which otherwise, to a Person under pious Qualifications, was visible enough. To prepare therefore for the Sight of the Miracle, it was the Custom to confess to a Priest, and offer at the Altar, before the Relick was shewn. This pretended Blood of our Saviour was kept in a Crystal, very thick on one Side, but very thin and transparent on the other. If a wealthy Person appeared, they turned the thick Side, where the Eye could see nothing: Which was done to open his Heart and his Locket. For when he had bought as many Muffles, and presented as much as they thought fit, they turned the thin Side, and then the Blood appeared. And this, as *William Thomas*, Clerk of the Coun-

Council to *Edward VI.* says, was no better than the Blood of a Duck renewed every Week.

Besides those Relicks, the Figures of our Lady of *Walsingham*, *Ipswich*, *Penrice*, *Islington*, *St. John Osulston*, and some others, were publickly burnt. There was also a Gigantic Image called *Darvel-Catharine*, brought out of *North-Wales*, where there was an old Prophecy, That a whole Wood should be burnt down by it. It happened at that time, that one *Forest*, a *Franciscan*, was hanged for dissuading his Penitents in Confession from owning the King's Supremacy. That Statue was kindled under him; and by that Execution the Prophecy was fulfilled in a jingle.

At some of the most Celebrated Tombs, there were very rich Presents made, many of which were kept in Honour of the Saint and his Votaries. Among these, *Archbishop Becket's* Tomb was one of the most Famous in *England*: It was a stately *Mausoleum*, adorned with Gold and Jewels of a prodigious Value. The King ordered that Monument to be defaced, and *Becket's* Bones to be burnt; and seized the vast Treasure offered at his Shrine. We need not wonder, that the Wealth of this Tomb should increase to so vast a Bulk, if we consider that since the Reign of King *Henry II.* few Persons of Condition went to *Canterbury* without visiting *Becket's* Tomb, and making Presents of Value. Among others, there was one almost inestimable Stone offered by *Lewis the Seventh of France*. King *Henry VIII.* had it set in a Ring, and wore it on his Thumb. *Bishop Goodwyn* reports there were two large Chests full of Gold and Jewels secured for that Prince, each of which was so heavy, that they had Eight Men to carry them out of the Church. The King ordered *Becket's* Name to be struck out of the Calendar, and forbade the keeping his *Holy Day*.

2 The Author gives a very large and curious Account of the Dissolution of Monasteries in the Reign of *Henry VIII.* The Readers will not be displeased to find here Part of a *Surrender* made by the Prior and Monks of *St. Andrew's, Northampton*.

" But as well we as others our Predecessors, called Religious Persons within your said Monastery, taking on us the Habite of outward Vesture of the saide Rewle, onley to the Intent to lead our

" Lifes in the ydle Quyetnesse, and not in the vertuose Exercyse, in a stately Estimation, and not in obedient Humylyte, have undre the Shadowe or Color of the saide Rewle and Habite, vaynely, detestably, and also ungodly, employed, yea, rather devowred the yerely Revenues yssuing and comyng of the saide Possessions, in continual Ingurgitations and Farcynge of our Carayne Bodyes, and of others, the Supportares of our Voleuptuose and Carnal Appetite, with other vayne and ungodly Expensys; and to the minyest Subversion of Devocion, and Clenness of Living, and to the moost notable Slander of Christ's Evangely, which in the Form of our Professyon, we did ostentate, and openly devaunt to kepe moost exatly; withdrawing thereby from the symple and pure Minds of your Grace's Subjects, the onely Truth and Comfort which they oughte to have by the true Faith of Christ, and also the Devyne Honor and Glory, onely due to the glorious Majesty of God Almighty, steryng them with all Persuasions, Ingynes, and Polye, to dedd Images, and counterfeit Reliques, for our damnable Lucre: Which our moost horryble Abominations and execrable Persuasions of your Grace's People to detestable Errours, and our long coveted Ypocrisie, cloaked with fayned Sanctity, we revolvyng dayly, and continually pondering in our sorrowful Harts, and thereby persevering the bottomlas Gulf of everlasting Eyle redye to devowre us, if persyting in this State of lyvynge, we shulde depart from this uncertyn and transitory Liffe, constrainyd by the intollerable Anguysh of our Conscience, called as we trust by the Grace of God, who wold have no Man to perysh in Synne, with Harts moost contrited and repenteante, prostrate at the noble Feet of your moost Royal Majestye, moost lamentably doe crave of your Highnes, of your abundant Mercy, to grant unto us moost greivous against God, and your Highnes, your moost gracious Pardon, for our saide sondry Offences, Omyssions, and Negligences, comytted as before by us is confessed, against your Highnes, and your moost noble Progenitors. And where your Highnes, being Supreme Hedd, immediately after Christ, of his Church,

" in

" in this yowr Roialme of *England*, so con-
" sequently generall and onely Reformato-
" r of all Religious Persons there, have full
" Authority to correct or dyssolve at yowr
" Grace's Pleasure and Liberty, all Covents
" and religious Companies abusing the
" Rewles of their Professyon. And more-
" over to yowr Highness, being owr Sov-
" raygn Lord, and undoubted Fownder of
" yowr saide Monastery, by Dissolution
" whereof apperteyneth onely the oryginal
" Title, and propre Inherytance, as well as
" of all other Goods moveable and unmo-
" veable, to the saide Monastery in any wise
" apperteyning or belonging, to be disposed
" and employed, as to yowr Grace's most
" excellent Wysedeme shall seeme expedient
" and necessary.

*Per me Franciscum Priorum.
Per me Joannem Sub-priorem.
Per me Joannem Petre.
Per me Jo. Harrold.
Per me Tho. Smith.
Per me Tho. Golston.
Per me Rob. Martin.
Per me Jacob. Hopkins.
Per me Ric. Bunnerby.
Per me Tho. Barby.
Per me Will. Ward.
Per me Tho. Atterbury.
Per me Wil'. Fowler.*

If the King read this Surrender, he must needs have been very well pleased with it.

3. Here follows a remarkable Trial, which I could not lay aside, without being guilty of a great Omission. In November 1538. *John Lambert*, a Person of Learning, was prosecuted for Heresy. He had been questioned for unsound Opinions by *Archbishop Warham*; but upon the Death of that Prelate, and the changing of Counsels at Court, he procured a Discharge. He kept School at *London*, and hearing *Dr. Taylor*, afterwards *Bishop of Lincoln*, preach for the Corporal Presence of Christ in the Sacrament, he came to him, declared his Dissent from that Doctrine, and drew up his Exceptions in Ten Arguments. This Paper was shewed by *Taylor* to *Dr. Barnes*, and those two Doctors carried it to *Cranmer* and *Latimer*. When *Lambert* was brought before them, they endeavoured to work him to a Recan-

tation; but all to no Purpose. He resolved to stand by his Paper, and appealed to the King.

The King received the Appeal, and, it may be, was not displeased with the Opportunity for shewing his Zeal and Learning. The Bishops and Temporal Nobility had notice given them of the Solemnity of this Trial, that the King intended to appear, and manage some Part of the Argument. At the Day prefixed, besides the Lords just now mentioned, the Judges, and the King's *Council*, with great Numbers of Spectators, came to *Westminster-Hall*, where Scaffolds were erected for the Convenience of hearing. The Bishops were seated on the King's Right Hand, and behind them the Judges, and the most Eminent of the Profession of the Law. The Temporal Nobility sat on his Highness's Left Hand, and after them the Gentlemen of the Court.

When the Prisoner was brought to the Bar, the *Bishop of Chichester* being commanded by the King to open the Trial, set forth, " That *Lambert* being charged with " Heretical Pravity, had appealed from his " Bishop to the King, as if he expected " more Favour from this Application, and " that the King would protect an Heretick : " From whence it appeared, that the Report of the Prisoner's being infected with " the *Lucksian Novelties*, had too much " Truth in it. Then speaking directly, as in " the King's Person, he dilates upon the " Progress already made in the *Reformation*. " That he had thrown off the Usurpations " of the See of *Rome*, discharged and disin- " corporated some idle Monks, who lived " onely like Drones in the Bee-hive: That he " had removed the idolatrous Regard for " Images, published the Bible in *English* for " the Instruction of all his Subjects, and " made some lesser Alterations in the Church, " which no body could deny were for the " publick Interest. But as for other things, " he was resolved to keep constant to the " Catholick Faith and Customs: That he " was very desirous the Prisoner would re- " tract his Errors, and return to the Catho- " lick Communion. That for this Purpose, " and to prevent the Extremities which " would otherwise follow, he had ordered " the Appearance of those Grave and Learn- " ed Men, (meaning the Bishops,) hoping, " that by the Advantage of their Character,

" and Force of their Reasoning, they would recover him to the Church, and wrest his unfortunate Opinion from him. But in case he was not to be removed from his Obstinacy, he was resolved to make him an Example; and by a Precedent of his own setting, acquaint his Judges and the Magistracy, how they ought to manage Heresy, and behave themselves upon such Occasions".

When Bishop *Day* had delivered his Majesty's Sense to this Effect, the King himself asked *Lambert*, what his Opinion was concerning Christ's Presence in the Sacrament of the Altar? *Lambert* not returning an acceptable Answer, they began to argue the Point, and oppose the Prisoner in the Forms of *Logick*. To be somewhat more particular, *Lambert* entered upon his Defence with some introductory Respect, acknowledged the King's Goodness for condescending to appear personally at the Tryal; and here he threw in some commending Expressions of his Highness's Learning and Judgment. The King interrupting him, told him in *Latin*, that he did not come thither to hear any Panegyrick upon himself; and therefore ordered him to come close to the Matter. This being pronounced with no friendly Countenance, disconcerted *Lambert*, and overset him in some Measure. The King asked him again, Whether Christ's Body was in the Sacrament or not? He replied in *St. Austin's Word*, *That it was his Body in a certain Manner*. The King bid him answer directly without Obscurity or Evasion; upon which he discovered his Opinion, and answered, *That it was not Christ's Body*. Whereupon the King pressed him with the Text in the *Evangelist*, *This is my Body*.

What a Spectacle, to see a great King sit upon the Trial of a poor Heretick, in the most solemn Manner, argue the Case with him, and resolved to put him to Death, for not believing that the Bread, consecrated by a Priest, is the true Body of Christ!

After some Essay upon the Controversy, the King disengaged, and ordered the Archbishop to confute him. *Cranmer* only spoke to that Part of *Lambert's* Objection, which maintained the Impossibility of a Body's being in two Places at once. This Assertion the Archbishop endeavoured to disprove from Christ's appearing to *St. Paul*: for though the Scripture assures us our Saviour is always

in Heaven, yet he was seen by *St. Paul* in the Air. To this *Lambert* returned, that our Saviour was then only in Heaven, and that the Human Appearance, and the Voice, was a Vision, but not the natural Body of Christ. This Dispute lasted for some time, and then *Cranmer* gave over.

Gardiner, Bishop of *Winchester*, thought *Cranmer* did not drive the Argument home, and therefore endeavoured to reinforce him. He cited two Texts of *St. Paul*, *Have I not seen Jesus; and elsewhere he was seen of Cephas, then of the Twelve*. After that he was seen of *James*, then of all the Apostles. And last of all, he was seen by me also. To this *Lambert* answered, he did not question the Appearance of our Saviour, but denied his Body being in two Places could be inferred from thence.

Tonstal came after *Gardiner*: He argued from God's Omnipotency, that our Apprehension of Possibilities was short: That Things which seemed Contradictions to us, were not so in themselves, nor out of the Reach of the Divine Power. That therefore since our Saviour had called the *Bread* his Body, we ought to believe he said no more than he intended to perform. To this *Lambert* answered, our Saviour has no where declared in *Scripture*, that he would change the *Bread* into his Body: That it was a Figurative Speech frequently used in the inspired Writings. Thus Circumcision is called the *Covenant*, the *Lamb*, the *Passover*; besides many other Instances.

Stokes, Bishop of *London*, came after *Tonstal*. He thought, as it is supposed, he had found out a way to remove the Contradiction, and reconcile the Mystery to other Appearances of Nature. He instanced in Water's being boiled till it evaporates into Air: From hence he inferred, that one Substance might be changed into another, the Accidents still remaining: For the Moisture which was the Accident of the Water, remains, when raised into Water. But to argue from an accidental Conversion, where the Substance is still the same, to a substantial Change, where one Substance is annihilated, and a new one brought in its place, was looked on as no better than a Fallacy.

Lambert, when disengaged from *Stokes*, had the Fatigue of defending himself against Six Bishops more: Insomuch that at last, either by the Greatness of the *Presence*, the Learna-

Learning of the Opposers, or the Length of the Argument, he seemed very much embarrassed, and almost driven to silence. At the Close of the Day, the King asked him if he was not satisfied, and whether he was resolved to live or die? *Lambert* answered, he cast himself wholly upon his Majesty's Clemency. The King told him, he would be no Patron to *Hereticks*; and therefore, if that was the farthest of his Answer, he must die. The Lord *Cromwell* read the burning Sentence by the King's Order. *Lambert* refused to live upon the Terms of a Recantation, suffered with great Fortitude, and, as *Fox* reports the Matter, was barbarously used by the Sheriff's Men.

Mr. *Collier* has inserted at the End of this Trial a Fragment of a curious Letter, never before published, and written by the Lord *Cromwell* to Sir *Thomas Wyat*, the King's Ambassador in *Germany*. In that Letter *Cromwell* magnifies the King's Performance at the Tryal, and proposes him as a Precedent to other Princes. The Words are these:

—“ The King's Majesty, for the Reverence of the Holy Sacrament of the Altar, did sit openly in his Hall, and there presided at the Disputation, Process, and Judgment of a miserable Heretick Sacramentary, who was burnt the 25th of November. It was a Wonder to see how Princely, with how Excellent Gravity, and Inestimable Majesty, his Highness exercised there the very Office of Supreme Head of the Church of England. How benignly his Grace essayed to convert the miserable Man: How strong and manifest Reasons his Highness alledged against him. I wish the Princes and Pontifices of Christendom to have had a meet Place to have seen it. Undoubtedly they should have much marvelled at his Majesty's most high Wisdom and Judgment, and reputed him no otherwise after the same, than in manner the Mirrour and Light of all other Kings and Princes in Christendom. The same was openly done with great Solemnity, whereby I doubt not but some of your Friends that have good leisure, shall by their Letters advertise you of the Discourse thereof”. The Letter of that Courtier bears Date, Nov. 28. 1538.

4. The following Passage concerns the Introduction of the Greek Language into the

University of Oxford, and the Opposition it met with. In the Year 1519, says Mr. *Collier*, Cardinal *Wolsey's Greek Lecture* was read at Oxford. It was the first of its Kind; for what had formerly been done by *Grecin* this way, had no Salary or publick Encouragement. However, it was by no means relished by the Majority of the Scholars. One Reason of their Disgust was the new Pronunciation and Method of teaching, introduced by this *Grecin* and *Erasmus*; but Ignorance and Idleness seem to have made their main Exception: They foresaw this Lecture would bring new Fatigues, and encroach upon their Diversion. They went so far as to form a sort of Confederacy against the Greek Part of the University. And to make their Animosity against this Language the more remarkable, they called themselves *Trojans*, and assumed the Names of some of the most Celebrated Heroes of *Troy*: And under this Distinction they raised a Body against the *Grecians*; insomuch that no Person that was known to understand Greek, could walk the Streets without being pointed at and abused. This Account Sir *Thomas More* gives of the Matter in one of his Letters. But it was not long before this Faction was brought off from their ignorant Sallies, by the interposing of Cardinal *Wolsey* and Sir *Thomas More*. The Flourishing of the Greek Language in Oxford raised an Emulation in the University of Cambridge, who being sollicited by their Chancellor, and by their Orator *Croke*, both good *Grecians*, began to make some Progress this way.

I shall observe, that, if one may believe the Author of a Book entituled, *A brief Account of the new Sect of the Latudinarians, &c.* printed at London 1669, the Greek Language did also meet with some Opposition at Cambridge. Those who have that Pamphlet, may consult the 23d Page.

I shall further observe that *Henry Stephens* informs us, that *Beda Doctor* of the *Sorbonne*, undertook to dissuade King *Francis* the First from settling Professors of Languages in the University of *Paris*, and maintained to that Prince, in the Presence of *Budæus*, that the Greek Tongue was the Cause of Heresies. If the Doctors of the Universities were so much against the Improvement of Learning, what shall we think of the Monks?

5. The Readers will find in this Work a short Account of the Abbeys of *England*, and their

their Revenues. The Abbies, suppressed in *England and Wales*, were Six Hundred Forty Five, according to *Cambden* in his *Britannia*; but the List of them, taken out of the *Court of First Fruits and Tents*, raises the Number to Seven Hundred Fifty Four. And therefore it is likely the Hundred and Ten Hospitals dissolved were thrown into the Catalogue. The yearly Revenue is computed at a Hundred Thirty Five Thousand, Five Hundred Twenty Two Pounds, Eighteen Shillings and Ten Pence. Besides this, the Money raised out of the Stock of Cattle and Corn, out of the Timber, Lead and Bells, out of the Furniture, Plate, and Church Ornaments, amounted to a vast Sum, as may be collected from what was brought off from the Monastery of St. *Edmund's-bury*. It appears from Records, that Five Thousand Marks of Gold and Silver, besides several Jewels of great Value, were seized by the Visitors of that Convent. As to the Revenues of the Abbies, they were sometimes undervalued by the Visitors, perhaps in hopes of an easier Grant or Purchase: And therefore in all likelihood, upon Rack-Rents, and *Modern Computation*, the Lands would rise to near twenty times as much.

6. Mr. *Collier* does very much lament the Loss of many Excellent Manuscripts lodged in the Abbies, that were suppressed, and quotes a Remonstrance made to King *Edward the Sixth* about it by *John Bale*, a great Enemy to Popery and the Monastick Institution. That Remonstrance is too curious not to be inserted here.

" Covetousness (*says John Bale* †) was " at that Time so busy about private Com- "modity, that publick Wealth in that most " necessary, and of respect, was not any " where regarded. A Number of them " which purchased those superstitious Man- "sions, reserved of those Library Books, " some to serve their Jakes, some to scour " their Candlesticks, and some to rub their " Boots, and some they sold to the *Grocers* " and *Soap-sellers*, and some they sent over " Sea to the *Book-binders*, not in small Num- " bers, but at times, whole Ships full. Yea, " the Universities of this Realm are not all

" clear in this detestable Fact. But cursed is " the Belly, which seeketh to be fed with so " ungodly Gains, and so deeply shameth his " natural Country. I know a Merchant- " Man (which shall at this time be name- " less) that bought the Contents of Two " Noble Libraries for Forty Shillings Price; " a Shame it is to be spoken. This Stuff " has he occupied instead of gray Paper, by " the Space of more than these Ten Years; " and yet he hath Store enough for as many " Years to come. A prodigious Example is " this, and to be abhorred of all Men which " love their Nation as they should do. Yea, " what may bring our Realm to more Shame " and Rebuke, than to have it noised abroad, " that we are Despisers of Learning? I " judge this to be true, and utter it with " Heaviness, that neither the *Britains*, un- "der the *Romans* and *Saxons*, nor yet the " *English* People under the *Danes* and *Nor- "mans*, had ever such Damage of their " Learned Monuments, as we have seen in " our Time. Our Posterity may well curse " this wicked Fact of our Age, this unrea- " sonable Spoil of *England's* most noble An- "tiquities".

It appears from these Words, that all the Monks of *England* were not like the *Franciscans* at *Oxford*, who took no Care of their Books. I shall set down in the Margin † a curious Passage, as I find it in the Preface prefixed

† *Quos (libros) videndi desiderio plane maximo cum longiuscule detentus fuisse, nuper contigit data justa occasione (nam id temporis fui Oxonii) ut copiam peterem videndi Bibliothecam Franciscanorum. Ad quod obstupuerunt Asini aliquot rudentes, nulli prorsus mortalium licere tam sanctos aditus & recessus adire, & mysteria videre, nisi Gardiano (sic enim praesidem suum vocant) & sacris sui Collegii Baccalaureis. Sed ego urgebam, & Principis diplomate munitus, tantum non coegi ut sacraria illa aperirent. Tum unus ex majoribus Asinis multa subrudens, tandem fores ægre referavit. Summe Jupiter! Quid ego illic inveni? Pulverem autem inveni, telas aranearum, tineas, blattas, situm denique & squalorem. Inveni etiam & libros, sed quos tribus obolis libenter non emerem: sic mihi quærenti the-*

† *Bale's Declaration upon Leland's Journal.*
An. 1549.

prefixed to a Tract of *Robert Grosseteste* †, Bishop of *Lincoln*, entituled *De Cessatione Legallium* *, and printed at *London* in 1658. in 8vo. Here follows the Substance of that Passage. *John Leland* says that Bishop *Grosseteste* bequeathed all his Books to those *Franciscans*. That Antiquary being at *Oxford* was extremely desirous to see that Library, and requested to be admitted into it. Whereupon some of those Asses, says he, wondering at such a Request, fell a braying, and said that none but their Warden, and the Batchelors of their Convent, were allowed to have the Sight of that Sacred Place. *Leland* being provided with a Patent from King *Henry VIII.* was very pressing upon them; and at last after many Instances, one of the oldest Asses, says he, grumbling at a strange rate, opened the Door of the Library. Good, God! continues the Antiquary, what did I find there? Dust, Cob-webs, and Mouldiness. I found also Books; but I would not give a Groat for them. All the Books of Bishop *Grosseteste*, which cost him a great deal of Money, were stolen by the *Franciscans* themselves, as they removed into other Convents. *Leland* ends with an Exclamation against those Monks.

7. I shall insert here several Particulars concerning Hereticks. In the Year 1510, several Persons mentioned by the Author, having abjured their Heresy, were ordered for their Penance to go bare-foot, and offer a Taper. Some of them were enjoyned to carry Faggots, and leave them at the Church-door, and to offer something at the high Altar, when Mass was said. *Stephen Castaline* being a leading Person, and having brought

thesauros, carbones se obtulerunt. Atque adeo haec sunt sancta mysteria quidem illa, qua tam religiose a *Franciscanis* observantur. Nam Roberti Episcopi volumina & exemplaria omnia, ingenti olim pretio comparata, furto ab ipsis *Franciscanis*, huc illuc ex praescripto commigrantibus, aut, ut verius loquar, vagantibus sublata sunt. Ite nunc, Pontifices, & hujusmodi Fratribus librorum thesauros conservandos ex testamento committite. *Joan. Leland, Collectaneorum Tom. IV. pag. 217. De Scriptorib. Angliae illustribus.*

† Born in Suffolk, in King's John's Reign.

* That Book (to say so by the by) is hardly worth reading.

over several to his Opinions, had something particular in his Penance. He was confined to a sort of perpetual Imprisonment in the Monastery of *Leeds* in *Kent*. And in case he took the Liberty of going farther than a Mile from that Place, was to be treated as a Person relapsed. The other Part of his Penance was to carry a Faggot the next Lord's-Day ‡ into the Church of *Tenderden*, before the Procession; and during this Confinement, he was to mortify in his Diet, and to be fed *Pane doloris*, and *aqua angustiae* ||. Mr. *Collier* mentions several Hereticks, who after their Abjuration were condemned to carry a Fagot tied to their Back.

In the same Year, one *William Potcar* of *Whitcalline* abjured the following Heresies.

That if the Father, Son, and Holy Ghost, were Three Persons, they were Three Gods; and that *Holy, Holy, Holy*, was sung in the Church-Service to signify as much.

Item, That he did not understand what Benefit the World received by our Saviour's Passion; because since his Incarnation, as well as before, Men are damned for Mortal Sins. And lastly, that he could not tell to what Purpose the Sacrament of Baptism was available.

Again, in the same Year, *Elizabeth Sampson*, in the Diocese of *London*, abjured two strange Heresies. She denied Christ's Ascension and the General Resurrection †.

In the Year 1532, the Body of *William Tracy* of *Taddington* in *Worcestershire*, Esq; was taken up by the Chancellor of *Worcester*, and burned. The Reason of this Proces was occasioned by an Omission (as it was then accounted) in *Tracy's* Will. It seems he had left out the usual Form of recommending his Soul to the Intercession of the Saints. This being observed at the *Probate*. *Archbishop Warham* sent a Copy of it to the University of *Oxford*, where being examined in *Convocation*, *Tracy* was pronounced a Heretick. Upon this Censure, the Order above-mentioned for taking up the Corps, was directed to the Chancellor.

8. Our Author maintains, that the Universities were bribed by King *Henry VIII.* to

‡ Sept. 11

|| Regist. Warham, fol. 144 173, 174.

† Regist. Fitz James, fol. 4.

give their Opinion in Favour of his Divorce. He quotes several Authorities for it, and among others, a Letter written by Dr. Croke to the King, wherein he acquaints that Prince, that "he had paid three and twenty Crowns to *Frier Thomas*, who, notwithstanding he had given hopes of his declaring for the Divorce, yet he had now deserted the King's Side, and argued for the Lawfulness of the Marriage——He lets the King know farther, that one *Ambrose* had twenty Crowns of him for determining at *Padua*, in Favour of the Divorce; and that two other Friers had twenty seven Crowns.

9. Mr. Collier concludes his Ecclesiastical History under the Reign of *Henry VIII.* with this Observation. "Another Circumstance of Advantage to his Memory, was the suppressing of the *Stews*. They were Houses inhabited by scandalous Women, and allowed by the State. There were Sixteen of them distinguished by Signs. They were called *Stews*, because the Place at first was furnished with Ponds for preserving Fish, and making them more clean and palatable——In the One and Twentieth Year of King *Henry* the Sixth, the *Stews* were shut up for some time. They were afterwards opened, but reduced from Sixteen to Twelve. But King *Henry* the Eighth, in the Thirty Sixth Year of his Reign, put an end to these infamous Liberties. The *Pandars*, with all their *Equipage*, were turned out by Sound of Trumpet, and their Houses assigned to People of regular Conversation".

I think it will not be improper to insert here occasionally several Passages taken from the publick Records at *Geneva*, and never before published. It will appear from thence, 1. That the Monks and Priests of that City lived a very disorderly Life 2. That the publick Lewdness which prevailed there, was entirely suppressed by the *Reformation*

Septemb. 21. 1417. The Prior of St. *Victor*, attended by some of his Monks, beseeches (*the Magistrates*) by Word of Mouth and in Writing, that the Brothel of the publick Women at St. *Christopher's* Gate be removed.

‡ MS. ex Biblioth. R. Harley Armig.

He was answered, that it had been settled there after a long Deliberation, as being the fittest Place that could be pitched upon.

October 1417. Ordered by the Bishop, that the publick Women be compelled to live in the Place assigned to them, and that they be not allowed to live any where else in the City. Item, that they shall not go to the *Stews*, but once in a Week, *viz.* upon a Saturday, if they will; but not upon any other Day, to avoid Scandal.

March 15. 1457. Ordered, that they shall be expelled from the Streets, and carried to the Brothel; and if they don't stay there, they shall be confined to the Prison of the *Isle* with their Ruffians. To that end, the *Chatellain* of the *Isle* shall be desired to join with the *Sindics*. All Persons are forbidden to take the said Women into their Houses.

June 3. 1459. Ordered in a General Council, that for the Honour of the Republick, no one, of any State or Condition whatsoever, shall let his House or Lodgings to any Whore, or disorderly Woman, excepting the Place of the usual Brothel.

August 1483. Resolved, that the *Austin Friars* of the *Pont d'Arve*, confined to the Bishop's Prison, shall not be allowed to go a begging, by reason of their Infamy.

September 1483. The Warden of the Convent of *Rive* represents, that in the Street over against the Church of his Convent, there are many lewd Women, and desires they may be removed. A Conference shall be held with the Bishop about it.

June 13. 1486. The Superior of the *Minor Friars* coming into their Convent, is informed of the Life and Manners of the Monks, that he may prevent worse things.

The Whores who live over-against and near the Convent of the *Minor Friars* are removed from thence (July 11.)

Again, July 25. the Whores are removed from *Verdaine-street* near the *Minor Friars*.

November 28. 1486. Resolved, that the Whores, who live between the Convent of the *Minor Friars*, and that of the *Observance*, be expelled.

March 1492. The Episcopal Court are desired, that *Ribaldæ*, *Meretrices*, & *Mulieres Lubricæ*, be expelled from the honest Streets, and obliged to live in the Places appointed for them, and never to go out of Doors without some Mark tied to their Arms.

June

June 17. 1492. They are expelled from the publick Streets, unless they wear a plain Mark (*signum eminens*) about their Arms, that they may be known.

March 10. 1503. Ordered, that a Queen of the Whores be elected. Accordingly, March 14. Louise, Daughter of the late P. Chas. vane de la Bonneville, was elected, and took the Oath according to Custom. She had Six pence given her.

November 26. 1512. Ordered, that *M. re-
trix non laude, sed vituperio digna, Lupanaris
sive Bordelli Regis efficiatur*, after Leave obtained for it from the Episcopal Court.

March 11. 1513. Ordered, that the Queen of the Whores shall draw up a List of the lewd Women, who live in the honest Streets.

October 10. 1513. The Sindics complain to the Episcopal Court about the Priests and their Whores.

March 5. 1518. Ordered, that the lewd Women shall return to the Brothel.

May 10. 1527. The Inhabitants of St Leger (a Parish of Geneva) complain of the lewd Women, who are in that Part of the Town, and of the Monks who flock to them. (*Querelaverunt de Putanis & certis Religiosis, qui ibidem afflunt.*) They were answered, that if they perceive those Monks in the Night, they shall give notice of it to the Sindics, or the Abbot, that the said Monks may be apprehended.

May 25. 1529. Ordered, that the lewd Women shall be confined to the publick Brothel, and to that end that the Queen of the Whores be sent for.

July 12. 1527. Many Citizens complain of the Priests of St. Magdalen's, who keep a bawdy House, where there are many Bawds. Ordered, that the Bawds shall be banished, the lewd Women compelled to live in the Place assigned to them, and that the said Priests shall be severely censured.

April 1. 1530. Ordered by the Council of Two Hundred, that for the time to come the Priests shall leave their Brothels, their Whores, and their Lewdness.

April 30. 1534. A new Order to confine publick Women to the publick Brothel.

August 18. 1534. Upon a Report made to the Council, that the Monks, Pimps, and Whores, who live in St. Victor's Suburb, have almost destroyed the Priory of the same Name, and carried away the Goods belonging to it. Ordered, that the Priory, the Church, and Houses belonging to the said Priory be pulled down. &c.

The Readers will excuse the plain Words I have used in translating the publick Records of Geneva. A Translation of such Pieces ought to answer the Originals in every thing.

Ever since the Reformation, no scandalous House has been tolerated at Geneva. If the Priests and Monks lived a very disorderly Life in such a small Town, one may easily guess that they gave themselves a greater Liberty in great Cities, like Paris, Venice, &c. Nothing can be more improper, than to forbid the Clergy to marry. When *Salvagus*, Bishop of *Sarzana*, and the Pope's Legate at *Gratz*, where the Archduke *Ferdinand* made his Residence, was ordered by *Paul V.* to visit the Churches of *Stiria*, *Carinthia*, and *Carniola*, he did not find above Six Priests in those three large Provinces, who did not keep Concubines. Most of those Priests had been educated among the Jesuits, who protected them, because they received Presents from them. They used their utmost Endeavours to prevent that Visitation †

But to return to Mr. Collier's Ecclesiastical History of England, I find so many curious Things in that Work, that I design to give a further Account of it.

† *Bernardini Giraldi pro Senatu Veneto Apologia contra Jesuitas*, page 165. of a Book entitled *Arcana Societatis Jesu*, printed in the Year 1635. That Apology is dated from Padua, Decemb. 1. 1634.

F R A N E K E R.

MR. *Muys* has made several Discoveries, whereby he unfolds the Mechanism of the Muscles.

He has observed, that the fleshy Fibres of the Muscles consist of other small Fibres, which he calls *Fibrilla*; that those *Fibrilla* do not exceed the Bigness of a very thin Hair, and that one may reckon about Five or Six Hundred in a fleshy Fibre, the Diameter whereof is somewhat greater than the Twenty Fourth Part of an Inch; that each of those *Fibrilla* does further consist of above Three Hundred transparent Tubes, so small, that if one should divide a Globule of Blood (which is only the 100000 th Part of a Grain of Sand, as it has been observed by Mr. *Leuwenhoek*) into Fourscore Parts, each of those Particles could hardly get through those small Tubes.

He shews, that though the fleshy Fibres of the Muscles adhere to the Tendon, and the Tendinous Membrane of the Muscle, yet the Tendinous Fibres are not a Continuation of the fleshy Fibres, as 'tis believed by most Anatomists. Which appears from this Observation: If the fleshy Fibres are separated from the Tendon with a Wooden Knife, or merely by drawing them, the Surface of the Tendon, to which the fleshy Fibres were joined, remains smooth and polished.

Mr. *Muys* having made several Injections of luke-warm Water through the Crural Artery of a young Lamb, the fleshy Fibres lost their Redness, and appeared perfectly white. The Fibres being thus whitened by an Injection of luke-warm Water, he made an Injection of a coloured Liquor through the same Artery; and then, not only the smallest Arteries were filled with that Liquor, but he further observed, that the Liquor went through each Fibre, either wavering too and fro, or making several Angles, or joining together by a great many *Anastomoses*. Besides, he saw that many small Branches of Arteries, which before escaped the Sight, appeared then scattered round about the small *Fibrilla*, and imbued with that coloured Liquor. Having observed, that those

Parts of the fleshy Fibres, which were about the last Extremities of the Arteries, appeared imbibed with that Liquor, he examined them with a Microscope; and he perceived that the small *Fibrilla* were filled and imbibed with the Liquor, and yet there appeared no Sign of that Liquor in the *Interstitia* of the *Fibrilla*.

Having made Injections through the Crural Artery, with another coloured Matter, into Muscles whitened by an Injection of luke-warm Water, he saw not only that all the Fibres in some Muscles, and most of them in others, were full of that Matter; but having examined them with a good Microscope, he observed that the *Fibrilla*, and even the smallest Tubes, were filled and imbibed with that Matter; and yet the small nervous Ramifications appeared perfectly white.

The Result of all these Observations is, 1. That those small Tubes, which make up a *Fibrilla*, are true Conduits; and that the Extremities of the Arteries reach them, and convey into them Part of their Liquor, which is carried back through the Veins into the Heart. 2. That the Globules of the Blood must needs be divided into Particles almost infinitely small, before they can get into those Tubes. That the Globules of the Blood may be thus divided, and so go through the small Tubes, is most evident from the Redness of the Fibres and *Fibrilla* of those Animals that have a red Flesh. Those who have read in Mr. *Leuwenhoek*, (Letter 42.) that these Globules are divided in the same manner to get into the last Extremities of the Arteries of the Brain; and those who know (as Mr. *Muys* has made it appear by Arguments grounded upon very curious Observations) that those Globules are extremely soft, and may easily be divided, will not wonder at such a Division.

Mr. *Muys* has added to those Observations very accurate Figures, which are a great Help to have a clear Notion of the Structure of the Fibres of the Muscles, and how the Arteries go through those Fibres.

That

That Learned Man has also made many other Discoveries concerning the Course of the Nerves, and their Ramifications in the Muscles.

H A L L.

THEY are Printing in *Livonia* a New Testament translated into the *Estonian* Language. *Estonia* is a Country situated in *Livonia* on the upper Part of the Gulph of *Finland*.

The *Estonians* grow up to Twenty, Thirty, and more Years, almost without any Knowledge of the Gospel. Their whole Instruction consists in some few Forms of Prayer and a Catechism, which they learn from the Clerk of the Parish; and then they think themselves sufficiently qualified to be admitted to the Sacrament of the Lord's Supper. The Clergy are either ignorant, or careless in dispensing the Mysteries of Salvation. For these Reasons, Care has been taken of late to translate the main Principles of Christianity by way of Questions and Answers into the *Estonian* Language, and to adapt them, as much as is possible, to the meanest Capacity.

What increases the Unhappiness of that People, is the Scarcity of Schools set up among them, and the little time Children have to go to School; which is only in the Winter: For in the Summer they are obliged to stay at home, and to keep the Houses, whilst their Parents are hurried abroad into the Service of their Lords, especially in Time of War and other Troubles.

The Condition of that People is so deplorable, that several Sheets of Paper would not be sufficient to give a Description of it. 'Tis true, many of late have been made sensible of their Ignorance in Religion; but they have hardly any time to consider and reflect upon what has been delivered to them. The Slavery they undergo, particularly in Time of War, is almost inexpressible; and being impoverished by endless Exactions, they have not wherewithal to maintain a sufficient Number of School-Masters. Some who desire to be instructed in Religion, are obliged to walk two *German* Miles on a Lord's-Day to hear a Sermon; and the very same Evening, or the next Morning sometimes, they are forced to work for their

Lords. In short, there is such a great Ignorance spread all over *Estonia*, that a Bible, or any other Devotional Book, is hardly to be found in many Families.

Wherefore it was thought fit to undertake last Winter an Impression of the New Testament in the *Estonian* Language; and, Thanks be to God, they are already gone as far as the Sixth Chapter of St. Luke's Gospel. But there will be so few Copies printed, and besides they will be so dear, that one Countryman in a Hundred will hardly be able to purchase it. All good Christians are therefore most humbly desired to contribute to the scattering of the Seed of the Gospel among that unhappy People. The Charitable Contributors may be assured, that whatever they are pleased to lay out for so good a Work, shall be carefully employed for that Purpose. The Impression of the whole Bible will be set about immediately, if there is any Prospect of getting the Charges requisite for so useful a Design.

This is the Substance of a Memorial sent to Dr. Franck, Professor in the University of Hall, by the Livonians concerned in the Impression of the New Testament just now mentioned.

V E N I C E.

THE Annals of *Baronius* have been reprinted here in Twelve Volumes in Folio. That great Work was begun in 1705, and finished in 1713.

R O M E.

FATHER *James Villote*, a Jesuit, has lately published an *Armenian Dictionary* with this Title:

Dictionarium Armeno-Latinum. 1714. Typis de Propaganda Fide.

The same Author has composed a *Christian Armenia*, or a Chronological Table of the Kings and Patriarchs of both *Armenia's*, from the coming of Christ till the Year 1712.

The Abbot *Crescimbeni* has finished his *Commentaries upon the vulgar Poesy*. The Fourth and Fifth Volumes are lately come out.

P O R T M A H O N.

I Never knew more Occasion for pious Books in any Place, than there is in this Island.

It would not be improper to have here some Old and New Testaments and Prayer-Books in the Spanish Tongue, and the Cuts in the Prayer-Books; for as the Religion of these People consists in Shew and Pageantry, the Cuts may raise their Curiosity to look into those Books.

To establish proper Methods for the Instruction of the Children of Officers as well as Soldiers, and to have the same performed with Decency, may soon have a good Effect upon the Popish Children of this Place, and perhaps extend farther.

It may be a little surprising to you to hear, that there should be such a Collection of Books made here, among the Gentlemen that belong to this small Army, (with some Assistance from the Fleet,) as has already formed a Library of between Eight and Nine Hundred Books, and such as may divert or improve Gentlemen of ingenious Inclinations; which we likewise hope to have enlarged and improved.

An Organ or two, with the Surplice, and the good Conduct of those that shall wear it, would in a little time remove a great Part of that Prejudice, which the Laity bear to us. But as to their Clergy, they will always be irreconcileable.

I believe it was never known that any Protestant dwelt upon this Island, till the Queen's Troops took it. The Number of the Inhabitans amounts to above Sixteen Thousand, all Enemies to us and our Religion; they are supposed to be the worst sort of People, that bear the Character of Christians: They are instructed by Three Hundred Priests, Friars, and Nuns.

They were formerly under the Direction of the Bishop of an Island within Seven Leagues of us; but we have now separated from that See, and their Church is put under the Direction of a Vicar General.

S T R A S B U R G.

T *Heophylact's Commentary upon the Minor Prophets*, will be shortly published from a Manuscript in the publick Library of this City.

P A R I S.

F *Ather Lamy* of the Oratory has sent to the Press a Book entitled *De Tabernaculo Fæderis, de sancta Civitate Jerusalem, & de Templo ejus*. The Author has been many Years about that Work. The First Part is printed off: The whole, consisting of Six Parts, will come out towards the latter End of the next Year with a great many Cuts.

L O N D O N.

P *Terigraphia Americana*. In which are the compleat Figures of near 200 different Sorts of rare American Ferns, with many Mushrooms, Agaricks, Truffles, Corals, Sponges, Shells, and other Sea Productions, with the Figures of some Insects, and other Animals. Price 10*s.* The Engraven Catalogue separate, 1*s.* Printed for James Petiver in Aldersgatestreet.

The same Author has lately published Mr. Ray's English Plants. Illustrated with 600 Figures in Folio Copper Plates. As also his *Gazophylacium Naturæ & Artis*. Containing the Figures of above 1200 different Animals, Plants, Fossils, &c. As also *Aquarium Animalium Amboinæ Icones & Nomina*. In which are the Figures of near 400 Crustaceous and Testaceous Aquatick Animals: With their Latin, English, Dutch, and Native Names, &c.

The following Quotation should have been inserted above, pag 121. at the End of the 2d Column. It has been overlooked by the Compositor.

Henry Stephens, *Introduction*—preparative à l'Apologie pour Herodote, in the Preface, pag. * III. Edit. 1566.

L O N D O N: Printed: And Sold by J. Roberts near the Oxford-Arms in Warwick-Lane. (Three Sheets, Price 9*d.*)